

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Method for the continuous production of a plasma diluent or dialysis solutions based on hydrolytically broken down starch derivatives that are optionally substituted, by hydrolyzing with a hydrolysis agent in an aqueous medium and subsequent neutralization to stop the hydrolysis, the method comprising:

a main hydrolysis wherein a an aqueous solution that contains the starch or optionally substituted starch to be hydrolyzed ~~that is soluble in the aqueous hydrolysis medium,~~ is continuously conveyed through at least one reactor essentially free of mixing against the force of gravity in the hydrolysis step at a flow rate of about 5 to 20 cm/min; and ~~wherein the plasma diluent or dialysis solutions have a molecular weight ranging from about 60,000 to 600,000.~~

a fine hydrolysis, wherein the fine hydrolysis is carried out after the main hydrolysis, a roughly hydrolyzed starch solution being fed to a tubular reactor with mixing elements at a preset temperature during said fine hydrolysis.

2. (Previously presented) Method according to claim 1, wherein the at least one reactor has at least one tubular reactor that has an inlet tube disposed at the bottom and an outlet tube disposed at the top when in the operative state.

3. (Cancelled)

4. (Previously presented) Method according to claim 1, wherein tubular reactors are arranged essentially vertically when in operation and starch or optionally substituted starch to be

hydrolyzed is conveyed from the bottom to the top.

5. (Previously presented) Method according to claim 1, wherein the reactor(s) are tubular reactor(s) that are tempered at a preset temperature of 25 to 100°C.

6. (Previously presented) Method according to claim 1, wherein main hydrolysis is carried out in a tubular tempered reactor for up to 85 to 95%.

7. (Previously presented) Method according to claim 1, wherein etherified starch is used.

8. (Previously presented) Method according to claim 3, wherein the fine hydrolysis is carried out with several reactors provided with static mixing elements.

9. (Previously presented) Method according to claim 1, wherein thin boiling starch is ethoxylated continuously with ethylene oxide in a base environment, the ethoxylated product is acidified with mineral acid, the main hydrolysis is carried out at a reaction temperature of 60 to 100°C and the hydrolysis is terminated by neutralization with lye and cooling.

10. (Cancelled)

11. (Currently Amended) Device for carrying out the method according to claim 1 including a feeding device for starch solution, a container for a hydrolyzing agent, a mixing and

heating station for mixing the aqueous starch solution with the hydrolyzing agent and heating the mixture to a preset temperature, and a pump for feeding the mixture into at least one reactor,

whereby the reactor, when in use, is arranged essentially vertically and has an inlet tube at the bottom and an outlet tube at the top and the pump is operated in such a way that it continuously feeds the aqueous starch solution to the inlet tube at the bottom at a preset pump rate, so that the aqueous starch solution is conveyed through the reactor to the outlet tube against the force of gravity; and

wherein a fine hydrolysis station in the form of at least one reactor unit is connected in tandem after the reactor as a main hydrolysis station, each of said reactor units having mixing elements.

12. (Cancelled)

13. (Previously presented) Device according to claim 11, wherein the reactors are each provided with a tempering unit.

14. (Previously presented) Method according to claim 2 further comprising a fine hydrolysis, wherein a fine hydrolysis is carried out after the main hydrolysis, the roughly hydrolyzed starch solution being fed to a tubular reactor with mixing elements at a preset temperature during said fine hydrolysis.

15. (Previously presented) Method according to claim 2, wherein the tubular reactors are arranged essentially vertically when in operation and product to be hydrolyzed is conveyed from the bottom to the top.

16. (Currently Amended) Method according to claim 3, wherein the tubular reactors are arranged essentially vertically when in operation and starch or optionally substituted starch to be hydrolyzed is conveyed from the bottom to the top.

17. (Previously presented) Method according to claim 2, wherein the tubular reactors are tempered at a preset temperature of 25 to 100°C.

18. (Currently Amended) Method according to claim 3, wherein the tubular reactors are tempered at a preset temperature of 25 to 100°C.

19. (Previously presented) Method according to claim 4, wherein the tubular reactors are tempered at a preset temperature of 25 to 100°C.

20. (Previously presented) Method according to claim 1, wherein main hydrolysis is carried out in the tubular tempered reactor for up to 85 to 95%.

21. (Previously presented) Method according to claim 7 wherein the etherified starch is wax cornstarch.

22. (Previously presented) Method according to claim 7 wherein a starch etherified with at least one of ethylene oxide and propylene oxide is used.

23. (New) Method for the continuous production of a plasma diluent or dialysis solutions based on hydrolytically broken down starch derivatives that are optionally substituted, by hydrolyzing with a hydrolysis agent in an aqueous medium and subsequent neutralization to stop the hydrolysis, the method comprising:

a main hydrolysis providing a roughly hydrolyzed starch solution where starch breakdown ranges from about 60% to about 95%, wherein an aqueous solution that contains the starch or optionally substituted starch to be hydrolyzed is continuously conveyed through at least one reactor essentially free of mixing against the force of gravity in the hydrolysis step at a flow rate of about 5 to 20 cm/min; and

a fine hydrolysis providing further starch breakdown, wherein the fine hydrolysis is carried out after the main hydrolysis, the roughly hydrolyzed starch solution being fed to a tubular reactor with mixing elements at a preset temperature during said fine hydrolysis.